FIG.1

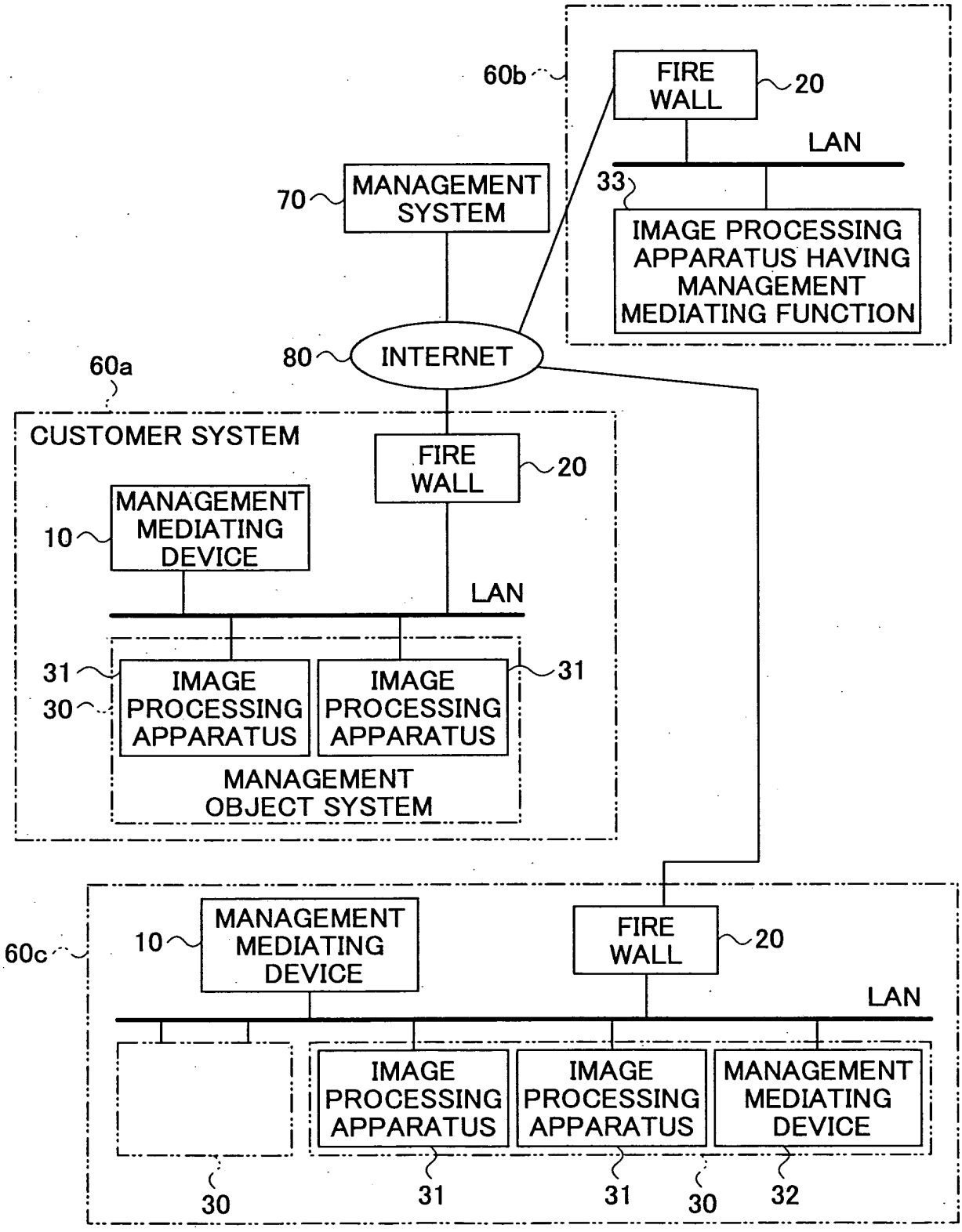
60b
FIRE WALL
20
LAN
33
70
MANAGEMENT SYSTEM
IMAGE PROCESSING APPARATUS HAVING MANAGEMENT MEDIATING FUNCTION
80
INTERNET
60a
CUSTOMER SYSTEM
FIRE WALL
20
MANAGEMENT MEDIATING DEVICE
10
LAN
31
30
IMAGE PROCESSING APPARATUS
IMAGE PROCESSING APPARATUS
31
MANAGEMENT OBJECT SYSTEM
60c
10
MANAGEMENT MEDIATING DEVICE
FIRE WALL
20
LAN
IMAGE PROCESSING APPARATUS
IMAGE PROCESSING APPARATUS
MANAGEMENT MEDIATING DEVICE
30
31
31
30
32

FIG.2

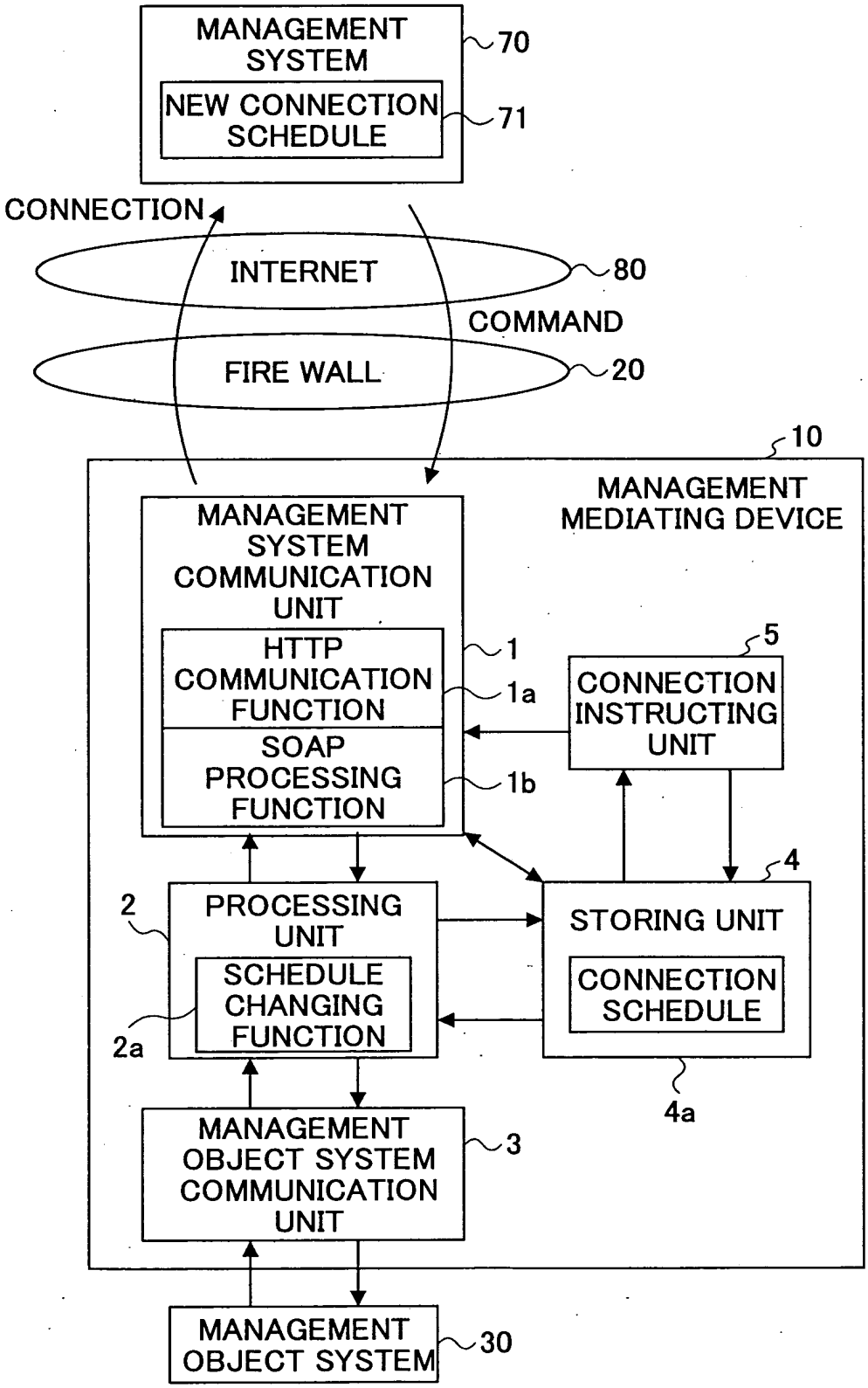
MANAGEMENT SYSTEM
70
NEW CONNECTION SCHEDULE
71
CONNECTION
INTERNET
80
COMMAND
FIRE WALL
20
10
MANAGEMENT MEDIATING DEVICE
MANAGEMENT SYSTEM COMMUNICATION UNIT
HTTP COMMUNICATION FUNCTION
1
1a
SOAP PROCESSING FUNCTION
1b
5
CONNECTION INSTRUCTING UNIT
4
2
PROCESSING UNIT
SCHEDULE CHANGING FUNCTION
2a
STORING UNIT
CONNECTION SCHEDULE
4a
MANAGEMENT OBJECT SYSTEM COMMUNICATION UNIT
3
MANAGEMENT OBJECT SYSTEM
30

FIG.3A

ID	START DATE AND TIME	END DATE AND TIME	INTERVAL	
23	YEAR:02,MONTH:4,DAY:1, HOUR:0,MUNITE:0,SECOND:0	--------	--------	41
13	YEAR:*,MONTH:*,DAY:*, HOUR:0,MUNITE:0,SECOND:0	--------	--------	41
11	YEAR:02,MONTH:*,DAY:25, HOUR:0,MUNITE:0,SECOND:0	--------	--------	41
			--------	41

FIG.3B

23	YEAR:02,MONTH:4,DAY:1, HOUR:0,MUNITE:0,SECOND:0	YEAR:03,MONTH:4,DAY:1, HOUR:0,MUNITE:0,SECOND:0	1 HOUR	41

FIG.3C

23	YEAR:*,MONTH:*,DAY:*, HOUR:14,MUNITE:0,SECOND:0	YEAR:*,MONTH:*,DAY:*, HOUR:18,MUNITE:0,SECOND:0	30 MINITES	41

FIG.3D

23	YEAR:02,MONTH:4,DAY:1, HOUR:0,MUNITE:0,SECOND:0	--------	3 HOURS	41

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FIG.4

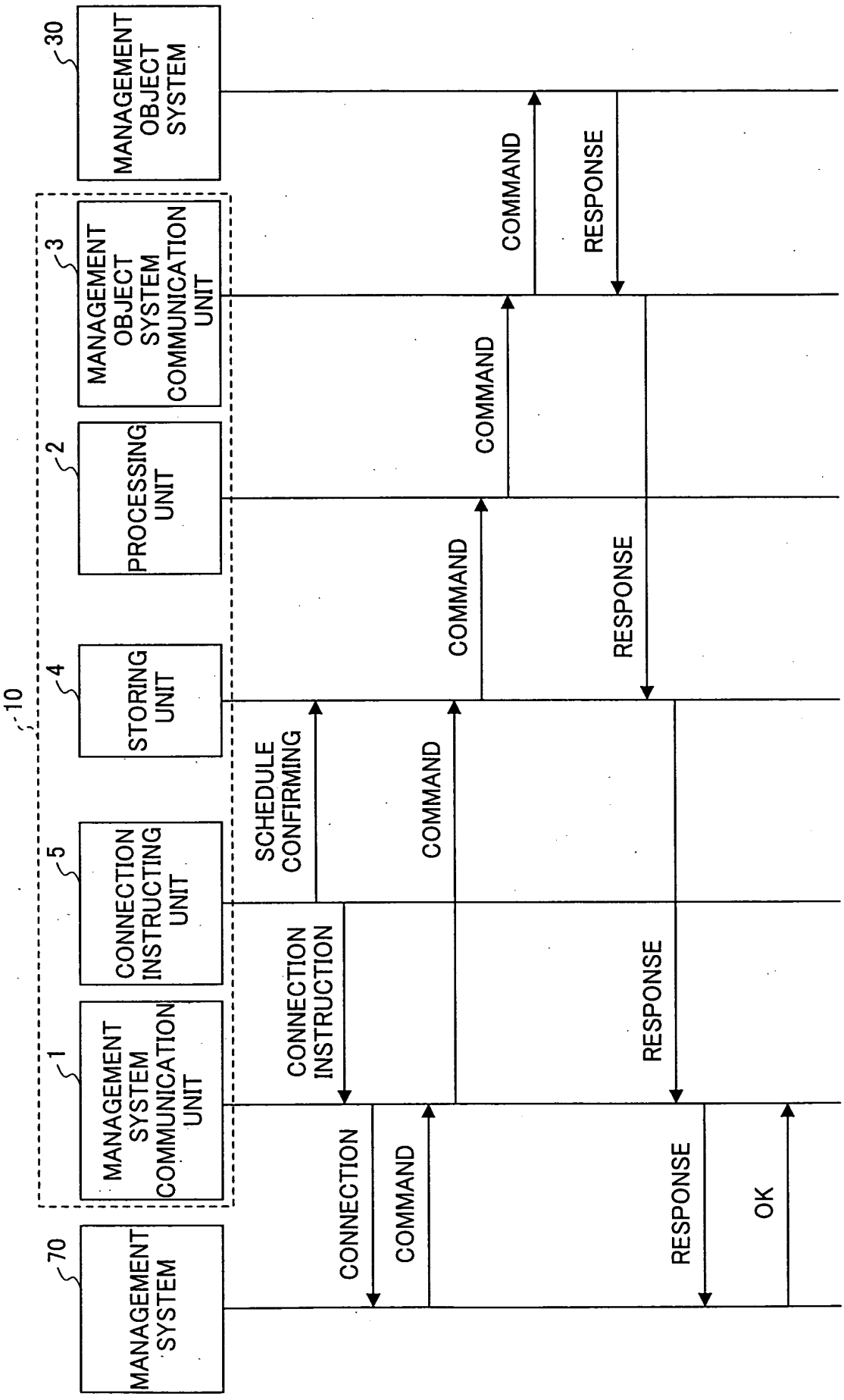
10
MANAGEMENT SYSTEM COMMUNICATION UNIT
1
CONNECTION INSTRUCTING UNIT
5
STORING UNIT
4
PROCESSING UNIT
2
MANAGEMENT OBJECT SYSTEM COMMUNICATION UNIT
3
MANAGEMENT SYSTEM
70
MANAGEMENT OBJECT SYSTEM
30
CONNECTION
COMMAND
RESPONSE
OK
CONNECTION INSTRUCTION
SCHEDULE CONFIRMING
COMMAND
RESPONSE
COMMAND
RESPONSE
COMMAND
RESPONSE

FIG.5

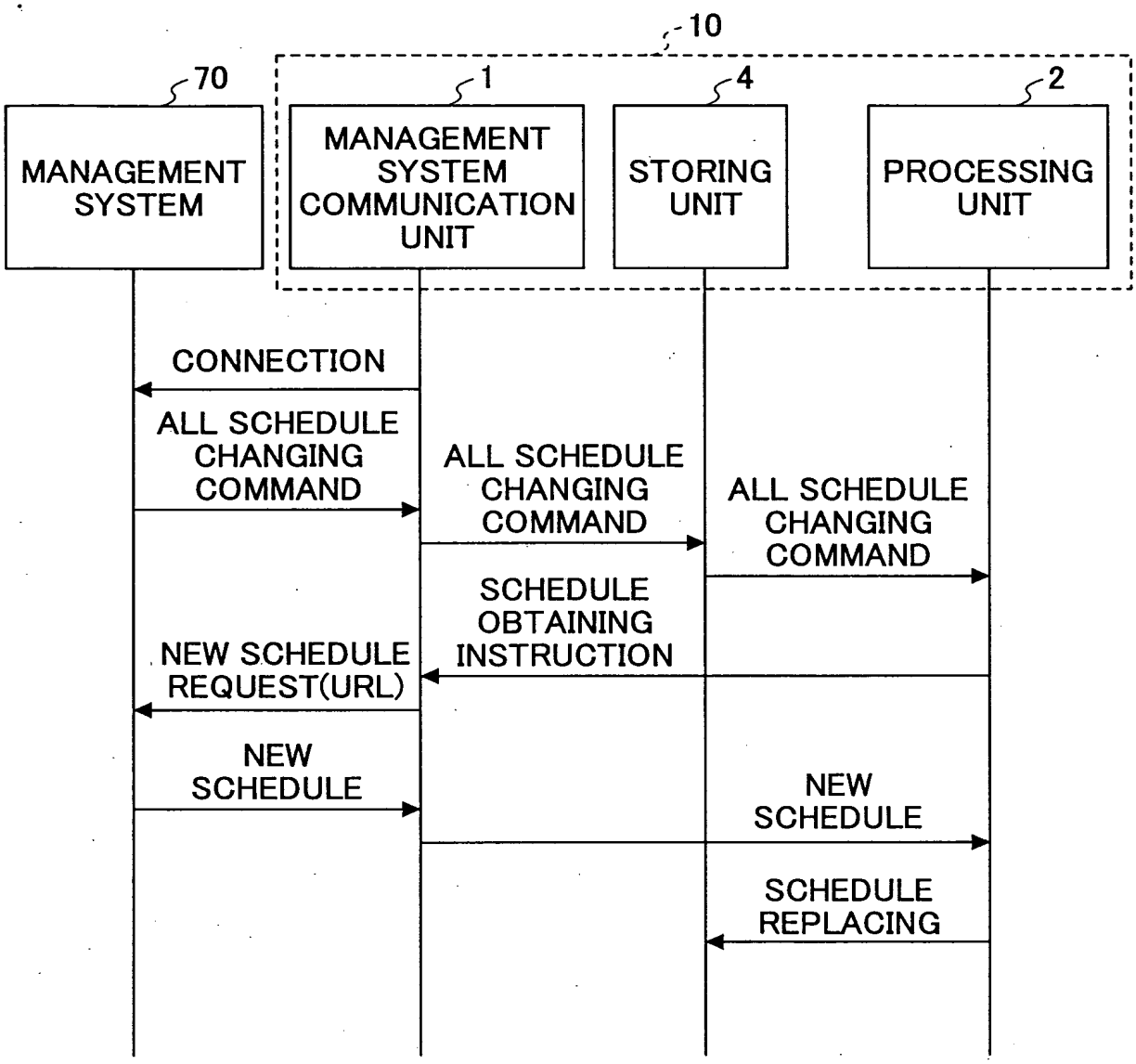
10
70
1
4
2
MANAGEMENT SYSTEM
MANAGEMENT SYSTEM COMMUNICATION UNIT
STORING UNIT
PROCESSING UNIT
CONNECTION
ALL SCHEDULE CHANGING COMMAND
ALL SCHEDULE CHANGING COMMAND
ALL SCHEDULE CHANGING COMMAND
SCHEDULE OBTAINING INSTRUCTION
NEW SCHEDULE REQUEST(URL)
NEW SCHEDULE
NEW SCHEDULE
SCHEDULE REPLACING

FIG.6

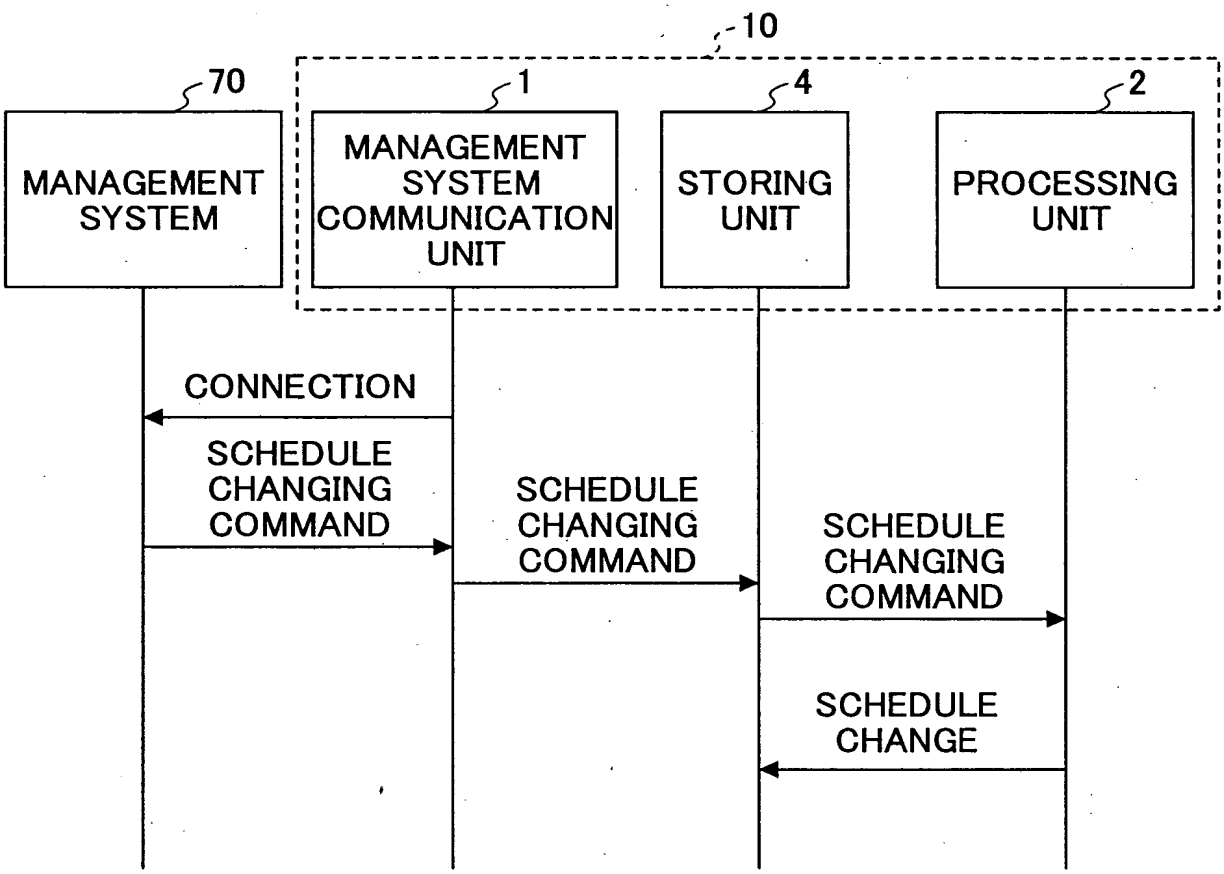
10
70
1
4
2
MANAGEMENT SYSTEM
MANAGEMENT SYSTEM COMMUNICATION UNIT
STORING UNIT
PROCESSING UNIT
CONNECTION
SCHEDULE CHANGING COMMAND
SCHEDULE CHANGING COMMAND
SCHEDULE CHANGING COMMAND
SCHEDULE CHANGE

FIG.7

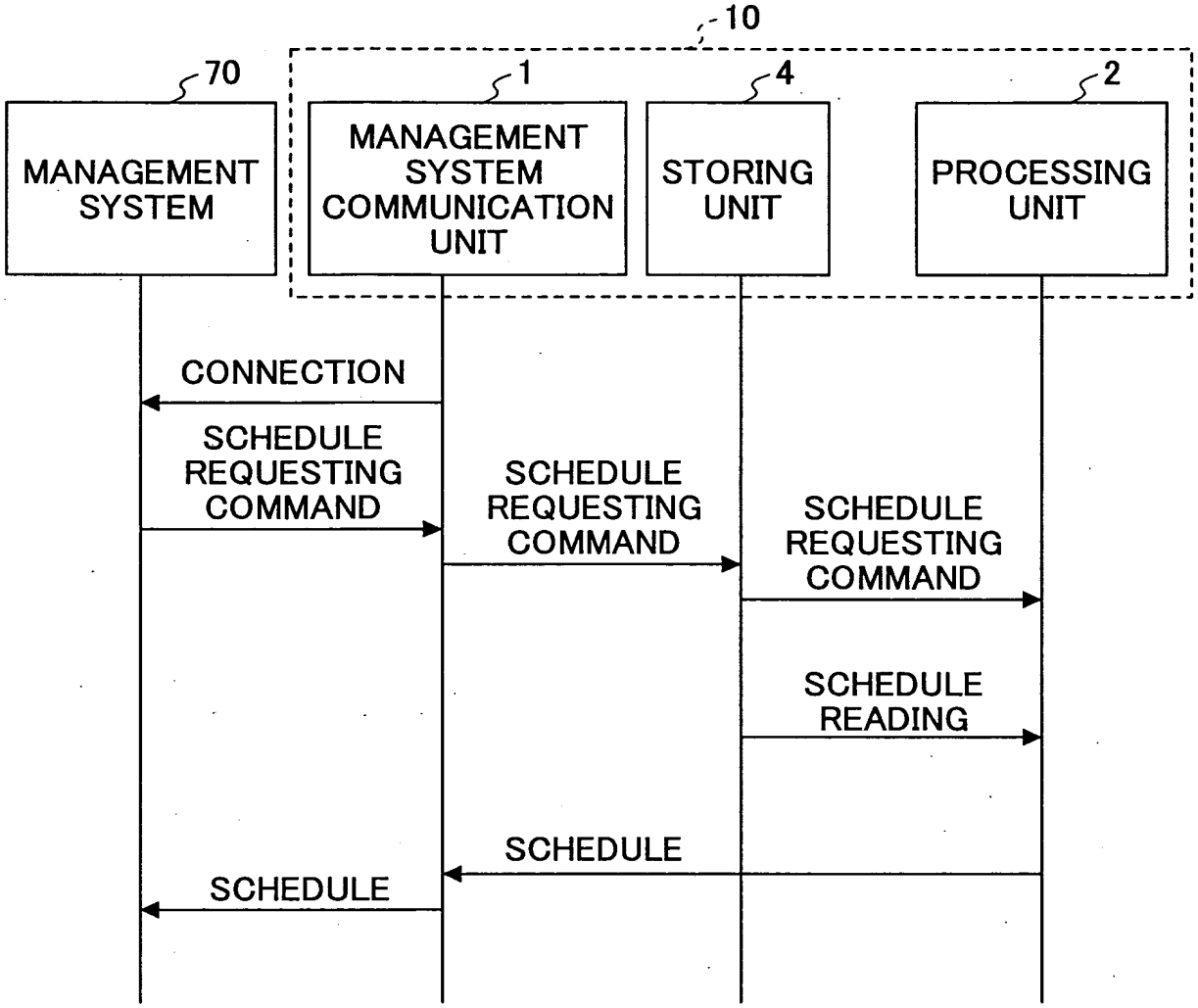

FIG.8

MESSAGE EXAMPLE AT THE TIME OF CONNECTION START

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```
GET/controler/command?termID=terminal1234 HTTP/1.1
Host: www.controlerDevice.org
Content-Type: application/soap+xml; charset="utf-8"
```

FIG.9

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COMMAND FORMAT

setSchedule(URL WHERE NEW CONNECTION SCHEDULE EXISTS)

EXAMPLE OF RESPONSE MESSAGE

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset="utf-8"
Content-Length: nnnn

<?xml version="1.0"?>
<env:Envelope xmlns:env="http://www.w3.org/2001/12/soap-envelope">
  <env:Header>
  <m:targetDevice xmlns:m="http://controlerDevice.org/controler"
                  env:mustUnderstand="true">
    terminal1234
  <m/:targetDevice>
</env:Header>
<env:Body>
  <m/setSchedule
          env:encodingStyle="http://www.w3.org/2001/12/soap-encoding"
          xmlns:m="http://controlerDevice.org/controler">
              <sourceURL>http://controlerDevice.org/storage/schedule1.dat,/sourceURL>
  </m:setSchedule>
 </env:Body>
</env:Envelope>
```

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FIG.10

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COMMAND FORMAT

addSchedule(UNIT SCHEDULE DATA)

EXAMPLE OF RESPONSE MESSAGE

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset="utf-8"
Content-Length: nnnn

<?xml version="1.0"?>
<env:Envelope xmlns:env="http://www.w3.org/2001/12/soap-envelope">
  <env:Header>
  <m:targetDevice xmlns:m="http://controlerDevice.org/controler"
                  env:mustUnderstand="true">
    terminal1234
  <m/:targetDevice>
</env:Header>
<env:Body>
<m/addSchedule env:encodingStyle="http://www.w3.org/2001/12/soap-encoding"
          xmlns:m="http://controlerDevice.org/controler">
    <data>
     <at>
      <data>
          <year>2002</year>
          <month>*</month>
          <date>25</date>
          <hour>24</hour>
          <min>00</min>
          <sec>00</sec>
      </data>
     </at>
    </data>
</m:addSchedule>
 </env:Body>
</env:Envelope>
```

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FIG.11

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COMMAND FORMAT

deleteSchedule(ID OF UNIT SCHEDULE DATA)

EXAMPLE OF RESPONSE MESSAGE

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset="utf-8"
Content-Length: nnnn

<?xml version="1.0"?>
<env:Envelope xmlns:env="http://www.w3.org/2001/12/soap-envelope">
  <env:Header>
  <m:targetDevice xmlns:m="http://controlerDevice.org/controler"
                  env:mustUnderstand="true">
    terminal1234
  <m/:targetDevice>
</env:Header>
<env:Body>
<m/deleteSchedule env:encodingStyle="http://www.w3.org/2001/12/soap-encoding"
          xmlns:m="http://controlerDevice.org/controler">
              <scheduleID>145</scheduleID>
</m:deleteSchedule>
 </env:Body>
</env:Envelope>
```

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FIG.12

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COMMAND FORMAT

readSchedule()

EXAMPLE OF RESPONSE MESSAGE

```
HTTP/1.1 200 OK
Content-Type: application/soap+xml; charset="utf-8"
Content-Length: nnnn

<?xml version="1.0"?>
<env:Envelope xmlns:env="http://www.w3.org/2001/12/soap-envelope">
  <env:Header>
  <m:targetDevice xmlns:m="http://controlerDevice.org/controler"
                  env:mustUnderstand="true">
    terminal1234
  <m/:targetDevice>
</env:Header>
<env:Body>
<m/readSchedule env:encodingStyle="http://www.w3.org/2001/12/soap-encoding"
          xmlns:m="http://controlerDevice.org/controler">
</m:readSchedule>
  </env:Body>
</env:Envelope>
```

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FIG.13A

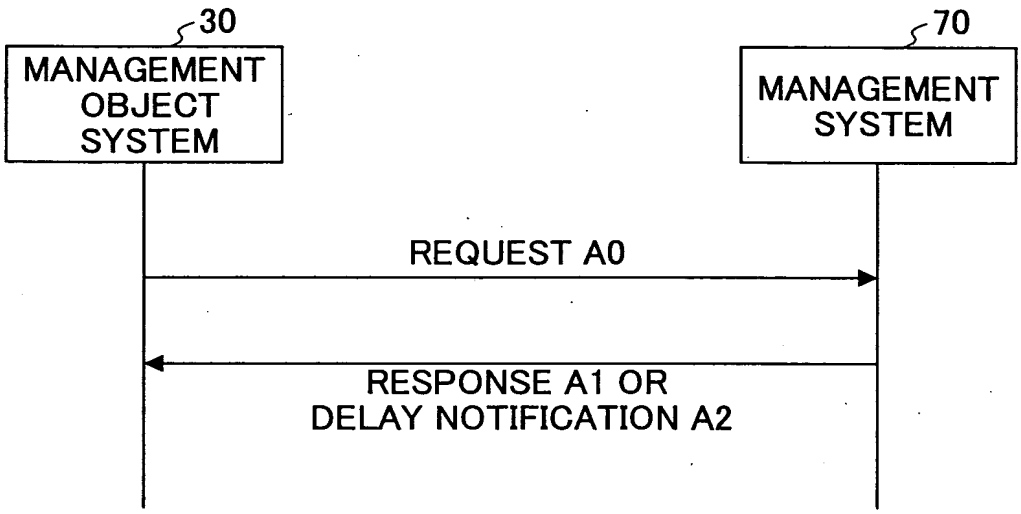


FIG.13B

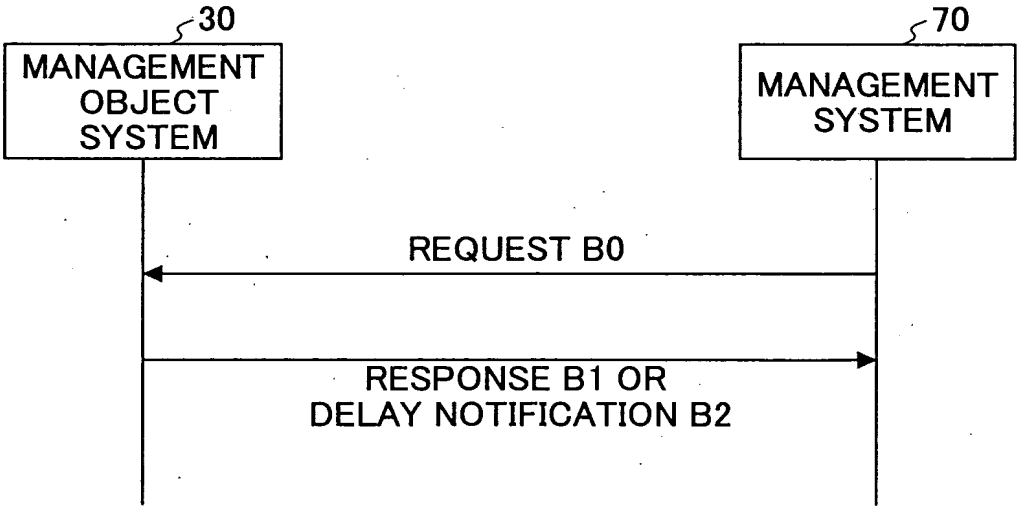


FIG.14

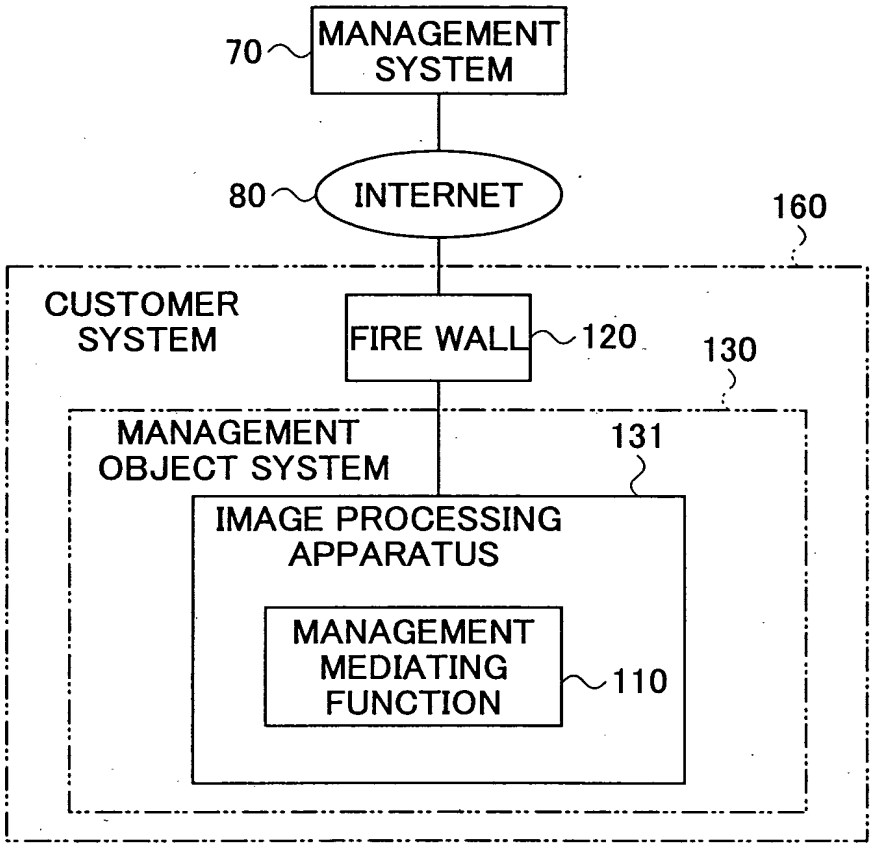

70
MANAGEMENT SYSTEM
80
INTERNET
160
CUSTOMER SYSTEM
FIRE WALL
120
130
MANAGEMENT OBJECT SYSTEM
131
IMAGE PROCESSING APPARATUS
MANAGEMENT MEDIATING FUNCTION
110

FIG.15

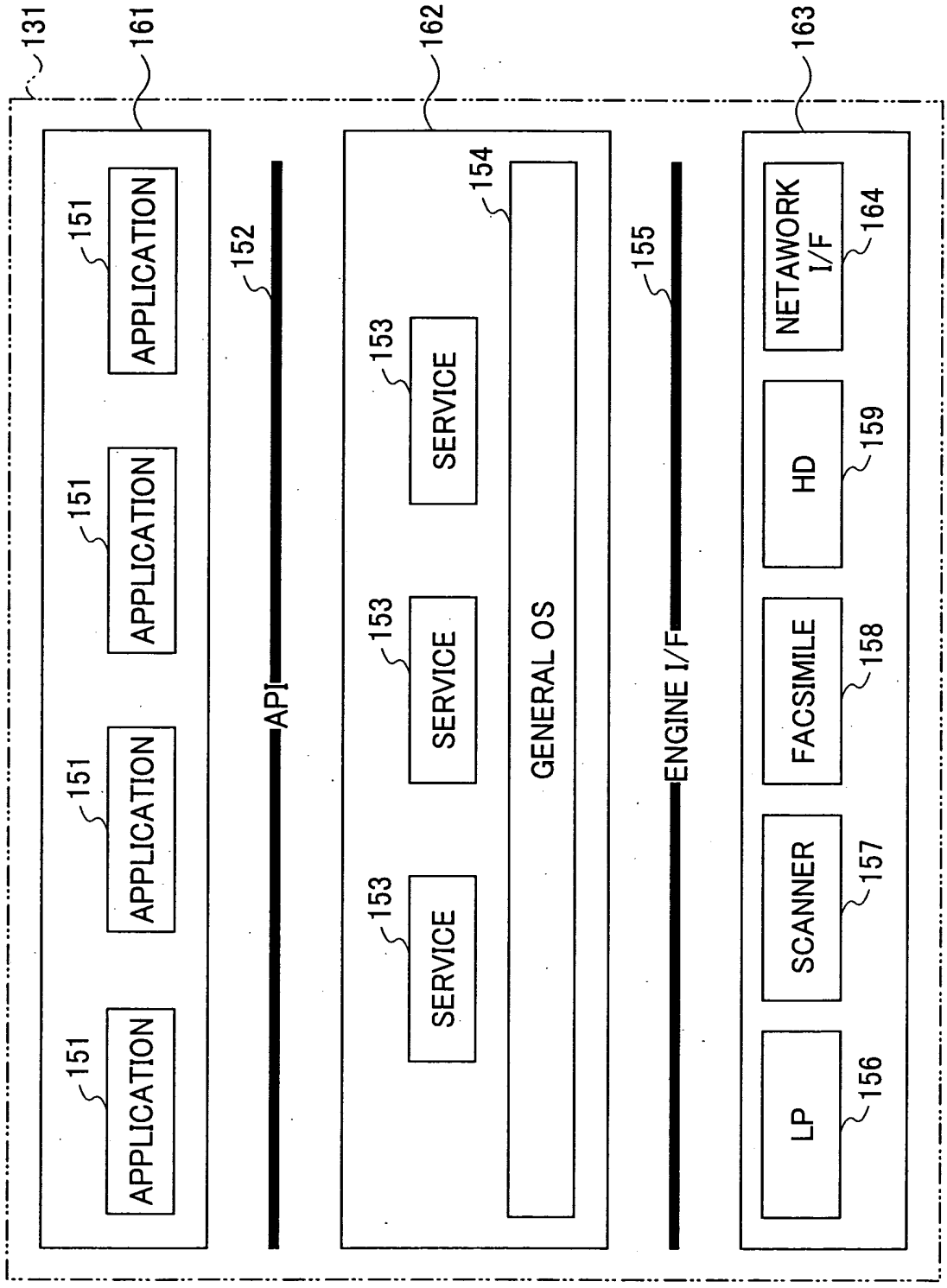
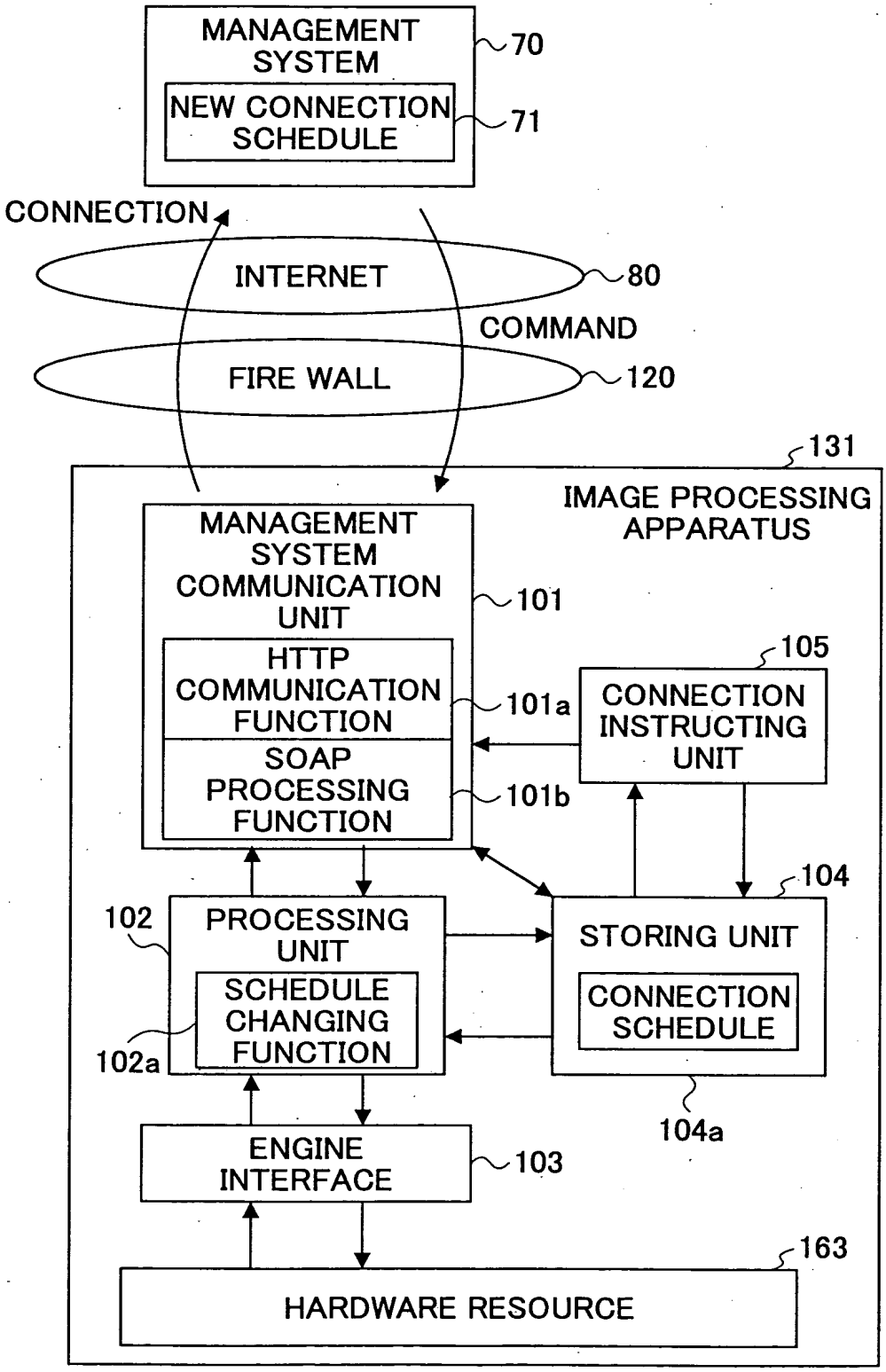

131
161
162
163
151
APPLICATION
152
API
153
SERVICE
154
GENERAL OS
155
ENGINE I/F
NETAWORK I/F
164
HD
159
FACSIMILE
158
SCANNER
157
LP
156

FIG.16


MANAGEMENT SYSTEM
70
NEW CONNECTION SCHEDULE
71
CONNECTION
INTERNET
80
COMMAND
FIRE WALL
120
131
IMAGE PROCESSING APPARATUS
MANAGEMENT SYSTEM COMMUNICATION UNIT
101
HTTP COMMUNICATION FUNCTION
101a
SOAP PROCESSING FUNCTION
101b
105
CONNECTION INSTRUCTING UNIT
104
STORING UNIT
CONNECTION SCHEDULE
104a
102
PROCESSING UNIT
SCHEDULE CHANGING FUNCTION
102a
ENGINE INTERFACE
103
163
HARDWARE RESOURCE